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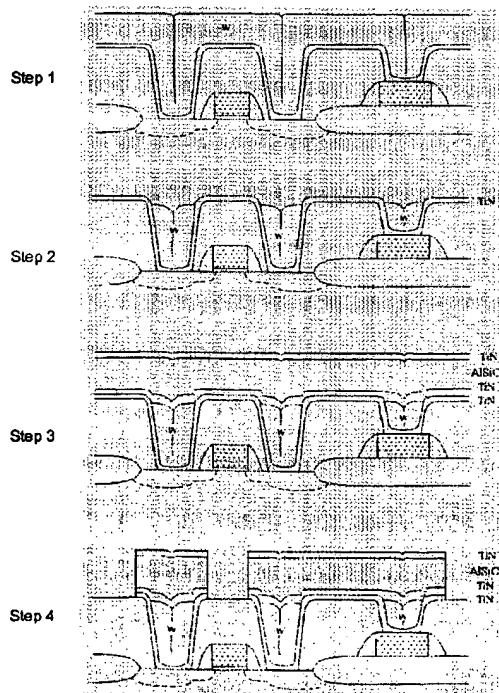
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(54) Fabrication of advanced silicon-based MEMS devices

(57) A micro-electro-mechanical (MEM) device and an electronic device are fabricated on a common substrate by fabricating the electronic device comprising a plurality of electronic components on the common substrate, depositing a thermally stable interconnect layer on the electronic device, encapsulating the interconnected electronic device with a protective layer, forming a sacrificial layer over the protective layer, opening holes in the sacrificial layer and the protective layer to allow the connection of the MEM device to the electronic device, fabricating the MEM device by depositing and patterning at least one layer of amorphous silicon, and removing at least a portion of the sacrificial layer. In this way, the MEM device can be fabricated after the electronic device on the same substrate.

Figure 14  
Interconnection strategy allowing the fabrication of advanced MEMS after the integrated circuit



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# EUROPEAN SEARCH REPORT

Application Number  
EP 04 10 0440

DOCUMENTS CONSIDERED TO BE RELEVANT					
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The present search report has been drawn up for all claims					
Place of search Berlin		Date of completion of the search 10 August 2005	Examiner Meister, M		
<p><b>CATEGORY OF CITED DOCUMENTS</b></p> <p>X : particularly relevant if taken alone Y : particularly relevant if combined with another document of the same category A : technological background O : non-written disclosure P : intermediate document</p> <p>T : theory or principle underlying the invention E : earlier patent document, but published on, or after the filing date D : document cited in the application L : document cited for other reasons ----- &amp; : member of the same patent family, corresponding document</p>					

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